

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
15 September 2005 (15.09.2005)

PCT

(10) International Publication Number
WO 2005/084905 A1

(51) International Patent Classification⁷: **B29B 15/10**, B29C 67/24, C08K 9/06

(74) Agent: HEYDE, Katrien; Bekaertstraat 2, B-8550 ZW-EVEGEM (BE).

(21) International Application Number:
PCT/EP2005/051015

(22) International Filing Date: 7 March 2005 (07.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04100938.2 9 March 2004 (09.03.2004) EP

(71) Applicant (for all designated States except US): NV Bekaert SA [BE/BE]; Bekaertstraat 2, B-8550 ZW-EVEGEM (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GARAM-SZEGI, László [HU/CH]; Avenue du Grammont 14, CH-1007 LAUSANNE (CH). PAX, Gabrielle Milly [LU/CH]; Avenue d'Epenex 3, CH-1022 CHAVANNES-PRÈS-RENNES (CH). BOUCHET, Jérôme [FR/FR]; 21 Chemin du Chancelier, F-69130 ECULLY (FR). MICHAUD, Véronique [FR/CH]; Chemin des Jordils, CH-1113 ST-SAPHORIN S/ MORGES (CH). MANSON, Jan-Anders E. [SE/CH]; Roc-Vigne Chemin des Plantaz, CH-1605 CHEXBRES (CH). MAUER, Daniël [BE/BE]; Allée des Peupliers 2, B-7320 BERNISSERT (BE).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/084905 A1

(54) Title: COMPOSITE ARTICLE COMPRISING A METAL REINFORCEMENT ELEMENT EMBEDDED IN A THERMO-PLASTIC POLYMER MATERIAL

(57) Abstract: The invention relates to a composite article comprising at least one metal reinforcement element embedded in a polymer material. An adhesion promoting layer is interposed between the metal reinforcement element and the polymer material. The adhesion promoting layer comprises an organofunctional silane and a hyperbranched polymer. The invention further relates to a method of manufacturing a composite article and to the use of a composite article as metal reinforced article.